

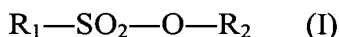
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

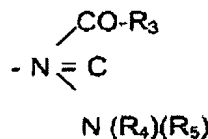
Claim 1 (currently amended): ~~Process~~A process for curing amino resins, ~~characterized in that comprising curing layers with thicknesses having a thickness of~~ up to 300 µm or filaments or fibrils with a diameter of up to 300 µm ~~and comprising~~

- ea) from 95 to 99.95% by mass of solvent-free meltable amino resin polycondensates having molar masses of 1 000 to 300 000,
- fb) from 5 to 0.05% by mass of curing agents which can be activated by actinic light and are composed of
- b1) acid formers of the type of blocked sulphonic acid of the general formula (I)

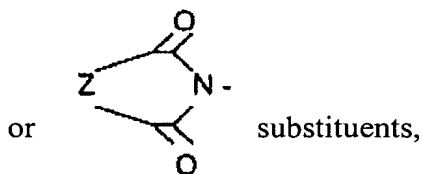


R_1 = unsubstituted or substituted aryl, biphenyl or alkyl,

R_2 = 4-nitrobenzyl, pentafluorobenzyl,



substituents



Z = C₆-C₂₄-aryl, C₆-C₄-alkyl, C₆-C₄-alkenyl,
 C₇-C₈-bicycloalkenyl,

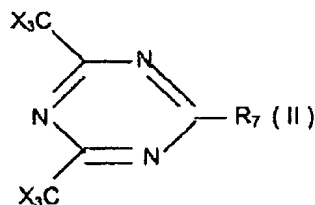
where

R_3 = non-substituted or substituted alkyl or aryl,
 R_4 = H, C₁-C₁₂-alkyl, phenyl, C₂-C₉-alkanoyl or benzyl,
 R_5 = H, C₁-C₁₂-alkyl or cyclohexyl

or R₃ and R₄ or R₅ together with the atoms to which they are attached form a 5- to 8-membered ring which can be fused by 1 or 2 benzo radicals,

and/or

b2) halogen-substituted triazine derivatives of the general formula (II)



X = Cl, Br

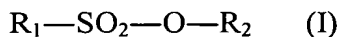
R₇ = C₁-C₁₆-alkyl, alkoxy,
 C₁-C₁₆-aryl
 biphenyl, naphthyl,
 and/or

b3) onium salts of the type of aryldiazonium salts, diarylhalonium salts, triarylsulphonium salts, triarylselenonium salts and/or N-alkoxypyridinium salts, and if desired

- g) from 1 to 20% by mass, based on the meltable amino resin polycondensates, of non-modified and/or modified maleic anhydride copolymers, and/or
- h) from 0.1 to 5% by mass, based on the meltable amino resin polycondensates, of nanoparticles in the form of phyllosilicates, hydrophilic or hydrophobic synthetic silicas, calcium carbonate or metal oxides of the ZnO, SnO, Al₂O₃ or TiO₂ type.

~~are cured by irradiation with actinic light at a temperature between the melting point of the amino resin polycondensate and the thermoinduced decomposition temperature of the light-activable curing agents, and if desired are subjected~~ optionally subjecting the layers, filaments or fibrils to a thermal aftercure below 250°C.

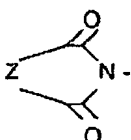
Claim 2 (currently amended): ~~Process~~ The process for curing amino resins according to Claim 1, ~~characterized in that wherein~~ the acid formers of the type of blocked sulphonic acid of the general formula



are blocked sulphonic acids in which the substituents

R_1 = unsubstituted or singly or multiply halogen-, C_1 - C_4 -haloalkyl-, C_1 - C_{16} -alkyl-, C_1 - C_4 -alkoxy-, C_1 - C_4 -alkyl-CO-NH-, phenyl-CO-NH-, benzoyl- and/or nitro-substituted C_6 - C_{10} -aryl or C_7 - C_{12} -arylalkyl,

R_2 = 4-nitrobenzyl, pentafluorobenzyl, $\begin{array}{c} \text{CO-R}_3 \\ \diagup \\ \text{N}=\text{C}- \\ \diagdown \\ \text{N}(\text{R}_4)(\text{R}_5) \end{array}$ Su substituents,

or  substituents,

Z = C_6 - C_{24} -aryl, C_2 - C_4 -alkyl, C_2 - C_4 -alkenyl,
 C_7 - C_8 -bicycloalkenyl,

where

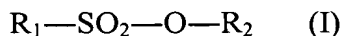
R_3 = C_1 - C_{12} -alkyl, C_1 - C_4 -haloalkyl, C_2 - C_6 -alkenyl, C_5 - C_{12} -cycloalkyl, unsubstituted or singly or multiply halogen-, C_1 - C_4 -haloalkyl-, C_1 - C_{16} -alkyl-, C_1 - C_4 -alkoxy-, C_1 - C_4 -alkyl-CO-NH-, phenyl-CO-NH-, benzoyl- and/or nitro-substituted C_6 - C_{10} -aryl and/or C_7 - C_{12} -arylalkyl, C_1 - C_8 -alkoxy, C_5 - C_8 -cycloalkoxy, phenoxy or H_2N -CO-NH-, -CN, C_2 - C_5 -alkyloyl, benzoyl, C_2 - C_5 -alkoxycarbonyl, phenoxycarbonyl, morpholino, piperidino, C_1 - C_{12} -alkyl, C_1 - C_4 -haloalkyl, C_2 - C_6 -alkenyl, C_5 - C_{12} -cycloalkyl, unsubstituted or singly or multiply halogen-, C_1 - C_4 -haloalkyl-, C_1 - C_{16} -alkyl, C_1 - C_4 -alkoxy, C_1 - C_4 -alkyl-CO-NH-, phenyl-CO-NH-, benzoyl- and/or nitro-substituted C_6 - C_{10} -aryl, C_7 - C_{12} -arylalkyl, C_1 - C_8 -alkoxy, C_5 - C_8 -cycloalkoxy-, phenoxy- or H_2N -CO-NH-,

R_4 = H, C_1 - C_{12} -alkyl, phenyl, C_2 - C_9 -alkanoyl or benzyl

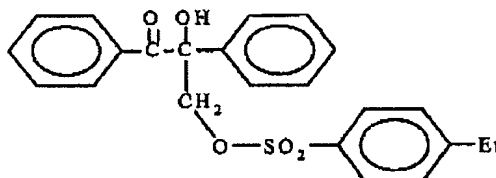
R_5 = H, C_1 - C_{12} -alkyl or cyclohexyl,

or R₃ and R₄ or R₅ together with the atoms to which they are attached form a 5- to 8-membered ring which can be fused by 1 or 2 benzo radicals.

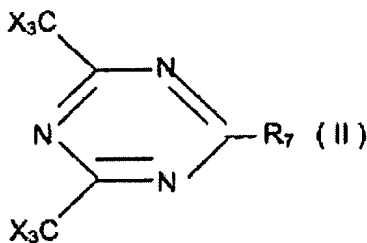
Claim 3 (currently amended): ~~Process~~The process for curing amino resins according to Claim 2, ~~characterized in that~~wherein the acid former of the type of blocked sulphonic acid of the general formula



is a blocked sulphonic acid of the structure

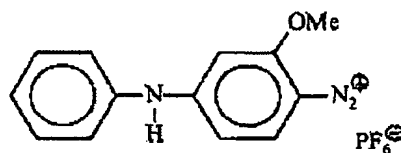


Claim 4 (currently amended): ~~Process~~The process for curing amino resins according to Claim 1, ~~characterized in that~~wherein the acid formers of the type of halogen-substituted triazine derivatives of the general formula (II)



are halogen-substituted triazine derivatives in which
 X = Cl and R₇ = p-methoxyphenyl.

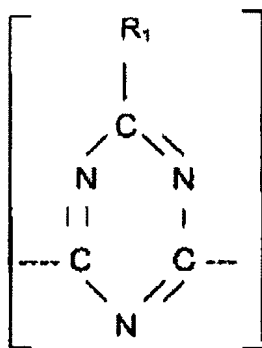
Claim 5 (currently amended): ~~Process~~The process for curing amino resins according to Claim 1, ~~characterized in that~~wherein the onium salt is an onium salt of the formula



Claim 6 (currently amended): ~~Process~~ The process for curing amino resins according to Claim 1, ~~characterized in that~~ wherein the amino resin polycondensates are polycondensates of melamine resins, urea resins, cyanamide resins, dicyandiamide resins, sulphonamide resins and/or guanamine resins.

Claim 7 (currently amended): ~~Process~~ The process for curing amino resins according to Claim 1, ~~characterized in that~~ wherein the polycondensates of melamine resins are mixtures of meltable 4- to 1000-nucleus polytriazine ethers,

~~where in~~ wherein the polytriazine ethers the triazine segments



$R_1 = -NH_2, -NH-CHR_2-O-R_3, -NH-CHR_2-O-R_4-OH, -CH_3, -C_3H_7, -C_6H_5, -OH,$
 phthalimido-, succinimido-, $-NH-CO-C_5-C_{18}-alkyl, -NH-C_5-C_{16}-alkylene-OH,$
 $-NH-CHR_2-O-C_5-C_{18}-alkylene-NH_2, -NH-C_5-C_{18}-alkylene-NH_2,$
 $-NH-CHR_2-O-R_4-O-CHR_2-NH-, -NH-CHR_2-NH-,$
 $-NH-CHR_2-O-C_5-C_{18}-alkylene-NH-, -NH-C_5-C_{18}-alkylene-NH-, -NH-CHR_2-O-$
 $CHR_2-NH-,$

$R_2 = H, C_1-H_7-alkyl:$

$R_3 = C_1-C_{18}\text{-alkyl, H;}$

$R_4 = C_2-C_{18}\text{-alkylene,}$

$-\text{CH}(\text{CH}_3)\text{-CH}_2\text{-O-}_{C_2-C_{12}}\text{-alkylene-O-CH}_2\text{-CH}(\text{CH}_3)\text{-}, -\text{CH}(\text{CH}_3)\text{-CH}_2\text{-O-}_{C_2-C_{12}}\text{-}$
 $\text{arylene-O-CH}_2\text{-CH}(\text{CH}_3)\text{-},$
 $-\text{[CH}_2\text{-CH}_2\text{-O-CH}_2\text{-CH}_2\text{]}_n\text{-}, -\text{[CH}_2\text{-CH}(\text{CH}_3)\text{-O-CH}_2\text{-CH}(\text{CH}_3)\text{]}_n\text{-},$
 $-\text{[-O-CH}_2\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-]}_n\text{-},$
 $-\text{[(CH}_2\text{)}_{2-8}\text{-O-CO-}_{C_6-C_{14}}\text{-arylene-CO-O-(CH}_2\text{)}_{2-8}\text{-]}_n\text{-},$
 $-\text{[(CH}_2\text{)}_{2-8}\text{-O-CO-}_{C_2-C_{12}}\text{-alkylene-CO-O-(CH}_2\text{)}_{2-8}\text{-]}_n\text{-},$

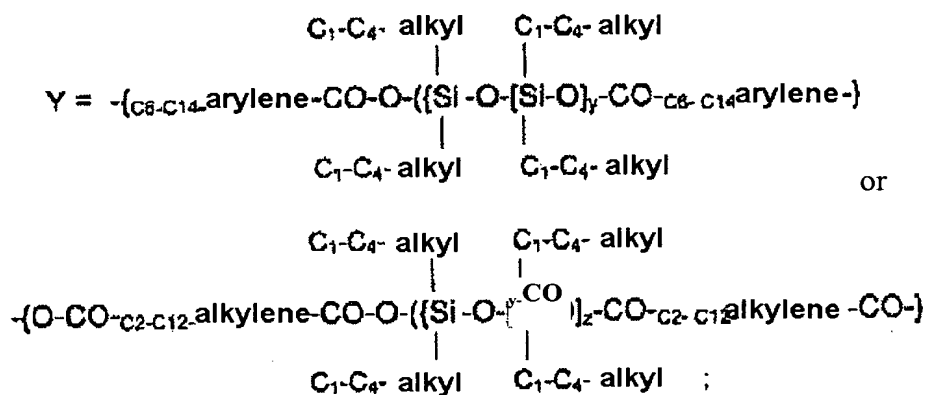
where $n = 1$ to 200 ;

- polyester sequences containing siloxane groups, of the type



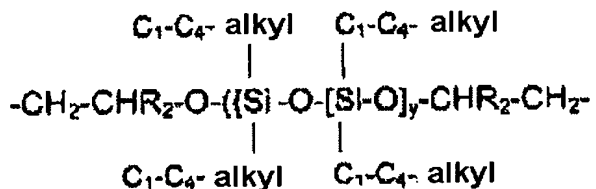
in which

$X = \{(\text{CH}_2)_{2-8}\text{-O-CO-}_{C_8-C_{14}}\text{-arylene-CO-O-(CH}_2\text{)}_{2-8}\}$ or
 $-\{(\text{CH}_2)_{2-8}\text{-O-CO-}_{C_2-C_{12}}\text{-alkylene-CO-O-(CH}_2\text{)}_{2-8}\}$



$r = 1$ to 70 ; $s = 1$ to 70 and $y = 3$ to 50 ;

- polyether sequences containing siloxane groups, of the type



where $R_2 = \text{H}$; $C_1-C_4\text{-alkyl}$ and $y = 3$ to 50 ;

- sequences based on alkylene oxide adducts of melamine, of the type of 2-amino-4,6-di-C₂-C₄-alkylenamino-1,3,5-triazine sequences;
- phenol ether sequences based on dihydric phenols and C₂-C₈ diols of the type of -C₂-C₈-alkylene-O-C₆-C₁₈-arylene-O-C₂-C₈-alkylene- sequences;

are linked by bridge members -NH-CHR₂-NH- or -NH-CHR₂-O-R₄-O-CHR₂-NH- and -NH-CHR₂-NH- and also, where appropriate, -NH-CHR₂-O-CHR₂-NH-, -NH-CHR₂-O-C₅-C₁₈-alkylene-NH- and/or -NH-C₅-C₁₈-alkylene-NH- to form 4- to 1000-nucleus polytriazine ethers with a linear and/or branched structure,

where in the polytriazine ethers the molar ratio of the substituents R₃:R₄ = 20:1 to 1:20 and the fraction of the linkages of the triazine segments through bridge members -NH-CHR₃-O-R₄-O-CHR₃-NH- is from 5 to 95 mol%.

Claim 8 (currently amended): ~~Process~~The process for curing amino resins according to Claim 1, ~~characterized in that~~wherein the curing of layers of amino resins takes place continuously by irradiation of the melt layer of the amino resin polycondensate applied to moving carrier materials.

Claim 9 (currently amended): ~~Process~~The process for curing amino resins according to Claim 1, ~~characterized in that~~wherein the curing of filaments or fibrils of amino resins takes place continuously by irradiation of the filaments or fibrils, discharged as a viscous melt, following the fibre-forming operation.

Claim 10 (currently amended): Amino resin products, ~~preferably sheetlike textile structures or coatings, produced according to one or more of Claims 1 to 9~~Claim 1.

Claim 11 (new): The amino resin products according to Claim 10 as sheet textile structures or coatings.

Claim 12 (new): The amino resin products according to Claim 2 as sheet textile structures or coatings.

Claim 13 (new): The amino resin products according to Claim 3 as sheet textile structures or coatings.

Claim 14 (new): The amino resin products according to Claim 4 as sheet textile structures or coatings.

Claim 15 (new): The amino resin products according to Claim 5 as sheet textile structures or coatings.

Claim 16 (new): The amino resin products according to Claim 6 as sheet textile structures or coatings.

Claim 17 (new): The amino resin products according to Claim 7 as sheet textile structures or coatings.

Claim 18 (new): The amino resin products according to Claim 8 as sheet textile structures or coatings.

Claim 19 (new): The amino resin products according to Claim 9 as sheet textile structures or coatings.